Southwestern Region Regional Office

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Route To:

Subject: Potential Forest Health Project, Mountainair RD

To: Forest Supervisor, Cibola National Forest

On July 30, Dave Conklin of our staff met with Ian Fox and Alan Kelso (Cibola NF) to examine a potential Forest Health-funded project area on the Mountainair RD. Karen Lessard and Francisco Lueras (Mountainair RD) were present for some initial discussion during this site visit. Dave conducted additional walkthroughs of the area on August 1.

Three separate units (designated here as "north, central, and south") totaling about 1000 acres were considered for an FY 2009 proposal. These areas had originally been selected for treatment under the Thunderbird Environmental Analysis, and had later been included in the "Ultima" CFRP Grant (which was subsequently terminated). Based on our discussions, the District now plans to reserve the south unit as a commercial firewood area, so only the north and central units were examined for the potential Forest Health project.

The north unit (about 170 acres) is located in Red Canyon, along both sides of FR 253 east of the Red Canyon Campground. The central unit (roughly 600 acres) lies about one mile to the south, and is bisected by Gotera Canvon. Both units are predominantly second-growth ponderosa pine, 80 to 90 years old. Scattered older pines are found in limited portions of both units, remnants of early-1900s logging. Alligator juniper is common in both units, and minor amounts of Douglas-fir and white fir are present in a few areas. Portions of both units were pre-commercially thinned 20 to 30 years ago. Excluding openings and occasional "understocked" areas, pine basal



North unit, southwestern portion

generally ranges from about 100 to 150 ft² per acre, with roughly 300 to 800 trees per acre. Site quality ranges from low to moderate in both units, but is somewhat higher overall in the north unit.

The central unit lies entirely within the perimeter of the November 2007 Ojo Peak Fire. Most of this unit received a light underburn, with consumption of some surface fuels but less than 10% average crown (needle) scorch. Scattered portions burned at somewhat higher intensity (e.g. the





western edge of the unit), and at least two sizable (>10 acre) "blowouts" with total crown consumption were observed.

With their high tree densities and consequent low vigor, both units are increasingly susceptible to bark beetle activity. Some evidence of this was observed in older morality that probably occurred during the 2000-2003 drought period. More recently, several small groups in both units were killed by Ips bark beetles; this activity appeared largely a result of nearby thinning slash generated in the spring of 2006. Dwarf mistletoe infection centers are scattered throughout this area, and have been foci for some of the past bark beetle activity. Overall mistletoe severity in both units is relatively light, with an estimated 15 to 20% of the total acreage in each unit affected.

The proposed treatment here would be an irregular, free thinning, providing much lower densities and more variable ("clumpy") stand structures. Small groups of generally inferior trees would be removed, while groups of better trees would be retained. The latter would be thinned, favoring the better dominant and co-dominant trees, to improve growth and vigor. Average basal areas would probably be reduced to around 60 ft² per acre.

Dwarf mistletoe infection centers would be targeted for removal, greatly reducing disease severity (average DMR) in these stands. It should be noted that, in the long-run, there are serious limitations in applying a group selection method for mistletoe management. As these small opening regenerate—a primary objective of group selection—they will almost invariably be exposed to infections along the periphery (or within the opening itself if some larger infected trees are retained). Better long-term success in creating new, healthy age classes via group selection can be expected in *uninfected* portions of a stand. Although there is no easy solution for mistletoe control (other than applying true even-aged management throughout an entire stand), follow-up treatments, including prescribed fire, can be used to advantage. The benefits of mistletoe to wildlife should also be considered; retention of some infected groups, especially larger infected trees, may be appropriate.

Ian plans to propose treatment of these areas via service contract (IDIQ), with decking of the larger material for utilization. We would support treatment of both these units, depending on our available funding. Because of its location and better overall site quality, the north unit is our higher priority. Please contact Dave, (505) 842-3288, if you have questions about this evaluation.

/s/ Debra Allen-Reid DEBRA ALLEN-REID New Mexico Zone Leader, Forest Health

cc: Ian R Fox Alan Quan Karen Lessard Alan Kelso